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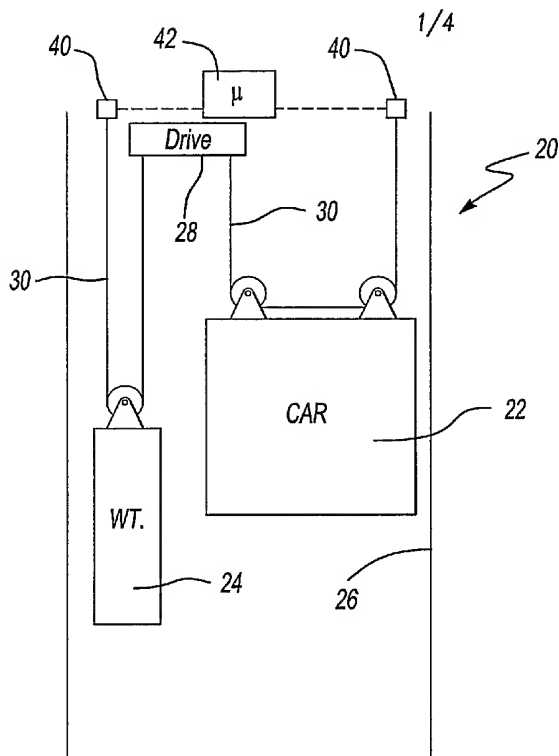
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(54) Title: ELECTRICAL SIGNAL APPLICATION STRATEGIES FOR MONITORING A CONDITION OF AN ELEVATOR LOAD BEARING MEMBER



(57) Abstract: An elevator load bearing member (30) monitoring device includes a controller (42) that applies a selected electrical signal to tension members (32) of the load bearing member (30). In one example, connectors (40) are associated with ends of the load bearing member (30) to establish an electrical interface between the controller (42) and the tension members (32). The connectors (40) facilitate establishing electrical circuit loops along the tension members (32) such that only non-adjacent tension members are energized at a selected time. A variety of circuit configurations are disclosed. The applied electrical signal in one example has a potential that is negative compared to a ground potential of a hoistway in which the elevator belt is used. In another example, the electrical signal comprises a plurality of pulses and has a duty cycle that is on the order of about one percent.



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